

PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON

A NOTE ON THE GENERIC NAMES *CYCLAGRAS* COPE
AND *LEJOSOPHIS* JAN (REPTILIA: SERPENTES)

BY JAMES A. PETERS

Smithsonian Institution, Washington, D. C.

Hoge (1958: 221) recently reviewed the status of the generic name *Lejosophis* Jan, 1863, concluding that Dunn (1944: 70) was correct in using it to replace *Cyclagras* Cope, 1885. He presented a synonymy of the monotypic genus, using the name *Lejosophis* for it. Hoge's action was based on the statement by Dunn (1944: 70) that Boulenger (1894: 144), acting as first reviser, fixed the type-species of *Lejosophis* (spelled *Leiosophis* by Boulenger) as *Xenodon gigas* Duméril, and therefore *Lejosophis* and *Cyclagras* became objective synonyms, having the same type-species. If Dunn's interpretation is valid, there can be no question that *Lejosophis* is the correct name for the genus, and it would require a petition to the International Commission of Zoological Nomenclature to set it aside in favor of the long-established *Cyclagras*.

Dunn's action was interpretive in nature. When the British Museum Catalogues were published by Boulenger, he did not designate type-species in any manner. He clearly did not like tautonymic names, and I know of none coined by him in the Catalogues. A type-species by monotypy in Boulenger's work is obvious. A new genus described in his Catalogues and including several species must await a subsequent reviser for designation of a type, because there is never any clue as to his intent. One occasionally can take advantage of Boulenger's style in the Catalogues as a basis for considering an action as type-species designation, post facto. This, in fact, is what Dunn has done.



Boulenger (1894: 144) gives a synonymy of the genus *Cyclagras* which includes the following lines:

"*Xenodon*, part., Dum. and Bibr., *Erp. Gén.* vii. p. 753 (1854).

"*Leiosophis*, part., Jan, *Arch. Zool. Anat. Phys.* ii. 1863, p. 320.

"*Cyclagras*, part., Cope, *Proc. Am. Philos. Soc.* xxii. 1885, p. 185."

Since Boulenger then used the junior synonym *Cyclagras* for the single species included (*Xenodon gigas* Duméril), it is clear that he did not consider *Leiosophis* available for the taxon. By using *Cyclagras*, however, for a monotypic genus, Boulenger designated *gigas* as type-species of *Cyclagras*, through the exclusion of any other species, or by monotypy. Since Cope originally described *Cyclagras* as a substitute name for *Lejosophis*, Dunn extended the argument to include *Leiosophis*, and concluded that Boulenger simultaneously designated *gigas* as its type-species. Dunn's reasoning would be acceptable if this were the only place where *Leiosophis* was mentioned, but Boulenger (1894) again referred to the genus on p. 180, where the pertinent lines read:

"*Cosmiosophis*, Jan, *Arch. Zool. Anat. Phys.* ii. 1863, p. 289.

"*Leiosophis*, part., Jan, l.c. p. 320."

These citations are in the synonymy of *Urotheca* Bibron. The point here is that the two citations to *Leiosophis* are identical, and are both referred to as "part.," or partim, Boulenger's way of indicating that only some, not all, of the species assigned to the genus by the original author are included in the genus being discussed. Jan included two species in *Lejosophis* when he described it, *Xenodon gigas* Duméril and *Coluber bicinctus* Hermann. In Boulenger, the "*Leiosophis*, part." under *Cyclagras* refers to *gigas*, and the "*Leiosophis*, part." under *Urotheca* refers to *bicinctus*. It is clearly invalid to say one of these can be interpreted as a restriction of type-species while the other is ignored.

It is possible on other grounds to arrive at a type-species for *Leiosophis*. As pointed out above, Jan (1863) assigned two species to his new genus. In the *Iconographie Générale des*

Ophidiens (1881), however, he pointed out in his index that *gigas* was to be placed in genus *Xenodon* and figured it (Livr. 48, pl. 3, fig. 6) under the name *Xenodon gigas*. Thus, one could claim that Jan himself has designated *bicinctus* Hermann as the type-species of *Lejosophis* through the same "exclusion principle" followed by Boulenger in the case of *Cyclagras*. Jan vacillated in his treatment of the name *gigas*, because it was given as *Lejosophis gigas* on a different plate (Livr. 50, pl. 2, figs. 25–27). In his index, under *Lejosophis gigas*, he wrote "voy. *Xenodon gigas*." Under the genus *Xenodon* in the index, he wrote "----- [for *Xenodon*] (*Lejosophis*) *gigas* Dum. Bibr.," which makes it look like a subgenus! Jan did not refer to the second species, *Lejosophis bicinctus* Hermann, in the Iconographie.

Cope (1885: 185) rejected *Lejosophis* Jan, indicating that he felt that Jan had misspelled the name, and that, properly spelled, it would be *Liophis*, a preoccupied name (*Liophis* Wagler, 1830). Cope mentioned both *gigas* Duméril and *bicinctus* Hermann in his discussion, so he clearly intended to include both names in his *Cyclagras*, which he coined as a replacement name for *Lejosophis*. No type-species for *Cyclagras* was designated until Boulenger restricted the name to *gigas* Duméril, thus fixing that name as the type-species. It is possible to argue that *Cyclagras*, since it was proposed as a replacement name for *Lejosophis*, and must therefore take the same generotype, has as its type-species *bicinctus* Hermann, and would thus be a generic synonym of *Hydrodynastes* Fitzinger, 1843. This would require a new generic name for *gigas* Duméril, an action I consider unnecessary, superfluous, and a flouting of the basic concept of stability in zoological names.

If, however, herpetologists are willing to accept the interpretation that Jan removed the taxon *gigas* from *Lejosophis*, transferring it to *Xenodon*, and thus automatically designated *Coluber bicinctus* Hermann as type-species by monotypy, all problems are resolved. This interpretation will be followed in the Catalogue of Neotropical Squamata now being prepared by Braulio Orejas-Miranda and myself. There will be two genera recognized, as follows:

Hydrodynastes Fitzinger

1843 *Hydrodynastes* Fitzinger, *Systema Reptilium*: 25.

Type-species: *Elaps Schrankii* Wagler, 1824 (= *Coluber bicinctus* Hermann), by original designation.

1863 *Lejosophis* Jan, *Arch. Zool. Anat. Phys.*, 2: 320.

Type-species: *Coluber bicinctus* Hermann, by subsequent monotypy. (See discussion above.)

1944 *Dugandia* Dunn, *Caldasia*, 3(11): 70. Type-species:

Coluber bicinctus Hermann, by original designation.

CONTENT: A single species; *Hydrodynastes bicinctus* (Hermann).

Cyclagras Cope

1885 *Cyclagras* Cope, *Proc. Amer. Phil. Soc.*, 22: 185.

Type-species: *Xenodon gigas* Duméril, by subsequent monotypy (in Boulenger, *Cat. Sn. Brit. Mus.*, 2, 1894, 144).

CONTENT: A single species; *Cyclagras gigas* Duméril.

LITERATURE CITED

- BOULENGER, G. A. 1894. *Catalogue of the Snakes in the British Museum (Natural History)*, Vol. 2, London, pp. i-xi + 1-382, 20 pls.
- COPE, E. D. 1885. Twelfth Contribution to the Herpetology of Tropical America. *Proceedings of the American Philosophical Society*, 1884 (1885): 167-194, 1 pl.
- DUNN, E. R. 1944. *Dugandia*, a New Snake Genus for *Coluber Bicinctus* Hermann. *Caldasia*, 3(11): 69-70.
- HOGE, A. R. 1958. Tres Notas Sobre Serpentes Brasileiras. *Papéis Avulsos de Departamento de Zoologia, São Paulo, Brasil*, 13 (7): 221-225.
- JAN, G. 1863. *Prodromo Della Iconografia General Degli Ofidi*, II^a Parte, VI^o Gruppo. *Coronellidae*. *Arch. Zool. Anat. Fis.*, 2 (2): 213-330.
- AND F. SORDELLI. 1860-1881. *Iconographie Générale des Ophiidiens*. Milan and Paris.